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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,633	01/06/2006	Masao Ieno	2005-2019A	3272

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EXAMINER	
GOTFREDSON, GAREN	

ART UNIT	PAPER NUMBER
1619	

NOTIFICATION DATE	DELIVERY MODE
10/27/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/563,633	IENO ET AL.	
	Examiner	Art Unit	
	GAREN GOTFREDSON	1619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 November 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,6-8 and 15-22* is/are pending in the application.

4a) Of the above claim(s) *15-22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2 and 6-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/6/06 and 1/31/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of the Application

This application has been re-docketed to Examiner Garen Gotfredson in Art Unit 1619.

It is noted that Applicants have defined "amino acid derivative" in a manner contrary to the accepted meaning of the term in the art. Specifically, Applicants define "amino acid derivatives" as encompassing unmodified polypeptides, protein, and hydrolyzed protein (see page 13, paragraph 26 of the specification). The Examiner has interpreted the claims in a manner consistent with Applicants' definition.

Status of the Claims

Applicants' amendments filed November 17, 2009 have been entered. Claims 1-2, 6-8, and 15-22 are pending in the application. Of these, claims 1-2 and 6-8 are under consideration on the merits. Claims 15-22 remain withdrawn from consideration.

The objections to claim 1 are withdrawn in view of Applicants' amendments.

The rejection of claim 1 under 35 U.S.C. 112, first paragraph is withdrawn in light of Applicants' amendment. The rejection of claims 1-2, 6-8, and 10 under 35 U.S.C. 112, first paragraph is also withdrawn in light of Applicants' amendment.

The rejection of claim 1 under 35 U.S.C. 102(b) as anticipated by Kausch et al. in view of Alberts et al. is withdrawn in view of Applicants' amendments. The rejection of claims 1, 6, and 8 under 35 U.S.C. 102(b) as anticipated by Imori et al. as evidenced by Harper et al. is also withdrawn in light of Applicants' amendments.

The rejection of claims 1-2, 6, 8, and 10 under 35 U.S.C. 103(a) as unpatentable over Imori et al. in view of Takamiya, and of claim 7 as unpatentable over Imori in view of Takamiya et al. and further in view of Nakashima et al., is withdrawn in view of Applicants' amendments and arguments.

New grounds of rejection, however, have been applied to the pending claims as detailed below.

Information Disclosure Statement

For the purpose of clarifying any ambiguity in the record, it is noted that all references from Applicants' IDS's filed on 1/6/06 and 1/31/07 have been considered. Newly initialed copies of the Form 1449's are enclosed with this Action.

Specification

35 U.S.C. 112, first paragraph, requires that the specification be written in "full, clear, concise, and exact terms."

The specification is objected to as it appears to be a translation from a non-English language document, and as such contains terms that are not clear, concise and exact. Some examples include the use of the following phrases:

"hand becomes hard" and "deterioration of hand" at page 2, second paragraph;

"further that hand lowers" at page 3, first full paragraph.

Applicant is invited to correct and/or clarify unclear language in the specification.

Claim Amendments

Applicants' amendment to claim 1 submitted 11/17/09 is non-compliant with 37 C.F.R. §1.121, which requires the indication of deleted subject matter using strike-through or double brackets. In the instant case, Applicants have attempted to delete Formula I of claim 1 by crossing out.

To promote compact prosecution, claim 1 has been examined as if Formula I had been properly deleted. Applicants, however, are required to resubmit the amendment to claim 1 in accordance with 37 C.F.R. §1.121 in their next Response. Alternatively, claim 1 may be cancelled and replaced with a newly numbered claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2 and 7-8 are rejected under 35 U.S.C. 103(a) as unpatentable over Nakashima et al. (U.S. Pat. No. 7,273,501; of record) in view of Nomura et al. (Japanese Patent Abstract of Publication No. 08-060547; of record in Applicants' IDS filed 1/6/06).

Regarding claims 1 and 8, Nakashima discloses a fibrous structure for use in clothing as a moisture absorptive/desorptive product (column 1, 1st paragraph),

comprising a carboxyl-group containing acrylic fiber polymer (column 6, third full paragraph) that is crosslinked via a reaction with a hydrazine compound (column 7, 1st full paragraph). The hydrazine cross-linker may be any of those recited by claim 1 (column 7, 2nd full paragraph).

Regarding claim 7, the fibrous structure of Nakashima possesses a saturated index of moisture absorption of 10% by weight or more at 20° C and 65% relative humidity, which encompasses Applicants' claimed range of 20% or more (column 3, lines 20-24).

Nakashima does not further disclose that the polymer is ionically bonded to one of the recited amino acid derivatives via an acidic group (claim 1).

Nomura, however, discloses that a fiber skin care product comprising serine will promote moisture retention on the skin (see Abstract). The product is obtained by immersing a fiber into an aqueous solution of sericin, a polypeptide rich in the amino acid serine.

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to modify the fibrous structure of Nakashima to include sericin as taught by Nomura, in order to further enhance its moisture conditioning properties. The addition of sericin to the fibrous structure will necessarily form ionic bonds between the sericin and the acidic bonds of the acrylic fiber polymer as recited by claim 1, since the process of immersing a fiber into an aqueous solution of an amino acid derivative as taught by Nomura is identical to the process described in Examples 1-12 of the instant specification.

Regarding claim 2, Nakashima does not explicitly disclose the claimed eluting rate of the amino acid derivative. The acrylic polymers disclosed as useful in the invention of Nakashima, however, include methyl (meth)acrylate and ethyl (meth)acrylate (column 6, 3rd full paragraph). These same polymers are also disclosed as useful in the instantly claimed invention (page 18, lines 5-6 of the specification). One of ordinary skill in the art, therefore, would expect that the elution properties of the claimed sustained release polymer would be the same as the fibrous structure of Nakashima, since a product cannot be separated from its properties.

The U.S. Patent Office is not equipped with analytical instruments to test prior art compositions for the infinite number of ways that an Applicant may present previously unmeasured characteristics. When the prior art appears to contain the same ingredients that are disclosed by Applicants' own specification as suitable for use in the invention, a prima facie case of obviousness has been established, and the burden is properly shifted to Applicants to demonstrate otherwise.

Claim 6 is rejected under 35 U.S.C. 103(a) as unpatentable over Nakashima et al. in view of Nomura et al. as applied above, and further in view of Hirose et al. (Japanese Patent Abstract of Publication No. 2002-013071; of record in Applicants' IDS filed 1/6/06).

The teachings of Nakashima and Nomura are relied upon as discussed above. Neither Nakashima nor Nomura further disclose a polymer composition as claimed, comprising an amino acid derivative that is arginine, lysine, or histidine.

Hirose, however, teaches that a fibrous skin care product comprising arginine will promote moisture retention on the skin (see Abstract).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to modify the fibrous structure of Nakashima to include arginine as taught by Hirose instead of sericin as taught by Nomura, since Hirose teaches that arginine has the same moisture retaining properties as serine. The addition of arginine to the fibrous structure will necessarily form ionic bonds between the arginine and the acidic bonds of the acrylic fiber polymer as recited by claim 1, since the process of immersing a fiber into an aqueous solution of an amino acid derivative as taught by Nomura is identical to the process described in Examples 1-8 of the instant specification.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to GAREN GOTFREDSON whose telephone number is (571) 270-3468. The Examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Yvonne Eyler can be reached on (571) 272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GJG/
October 22, 2010

/Patricia A. Duffy/
Primary Examiner, Art Unit 1645